

Patent claims

- 1 Sound receiver for an implantable hearing aid, in particular for a Cochlea implant, comprising a sound receiver being an implantable electromechanic transducer, which converts the force resulting of an accelerated mass into an electric signal, the sound receiver provides a mounting mechanism on at least one of the ossicles in the ossicle chain.
- 2 Sound receiver of claim 1, further comprising a transducer selected from the group of the following electromechanic transducers: A) piezoelectric transducer, particularly resonance frequency transducer, foil oscillator. B) magnetostrictive transducer, C) capacitive transducer and D) inductive transducer.
- 3 Sound receiver of claim 1, further comprising an electromechanical transducer with a biologically compatible surface, in particular a hermetic housing made of biologically compatible material.
- 4 Sound receiver of claim 1, further comprising a sound receiver housed in a metallic conductive housing (20).
- 5 Sound receiver of claim 4, further comprising an A/D-converter and an impedance transformer placed inside the housing (20).
- 6 Sound receiver of claim 1, further comprising a mounting mechanism adapted to one of the following ossicles: malleus, incus and/or stapes.
- 7 Sound receiver of claim 1, further comprising that its entire mass doesn't exceed 50 milligrams and is particularly below 30 milligrams.

- 8 Sound receiver of claim 1, further comprising a vibratory structure (22) exclusively placed inside a housing (20).
- 9 Usage of a sound receiver of claim 1, comprising a sound receiver rigidly fixed to malleus or incus, whereby incus and stapes are disconnected so that the incus can move independently from the stapes.